UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,732	07/21/2006	Yo Taniguchi	520.46403X00	8194
20457 7590 01/23/2009 ANTONELLI, TERRY, STOUT & KRAUS, LLP 1300 NORTH SEVENTEENTH STREET			EXAMINER	
			ARANA, LOUIS M	
SUITE 1800 ARLINGTON, VA 22209-3873			ART UNIT	PAPER NUMBER
			2831	
			MAIL DATE	DELIVERY MODE
			01/23/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
Office Action Commons	10/586,732	TANIGUCHI ET AL.				
Office Action Summary	Examiner	Art Unit				
	Louis M. Arana	2831				
The MAILING DATE of this communication appo Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on						
	-· action is non-final.					
·—	, 					
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
		3.3.2.2.3.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-8</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-8</u> is/are rejected.	·					
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
Annella ediana Danama						
Application Papers						
9)⊠ The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>21 July 2006</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.						
Applicant may not request that any objection to the d	* , ,	, ,				
Replacement drawing sheet(s) including the correction		• '				
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a)⊠ All b)□ Some * c)□ None of:						
 ☐ Certified copies of the priority documents 	have been received.					
2. Certified copies of the priority documents						
3. Copies of the certified copies of the priori	ty documents have been receive	ed in this National Stage				
application from the International Bureau	application from the International Bureau (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list of the certified copies not received.						
Attachmont/e\						
Attachment(s) 1) X Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date						
3) Notice of Informal Patent Application 5) Notice of Informal Patent Application						
Paper No(s)/Mail Date <u>7/06</u> . 6) U Other:						

Application/Control Number: 10/586,732 Page 2

Art Unit: 2831

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

- 2. The abstract of the disclosure is objected to because it should be a single paragraph. Correction is required. See MPEP § 608.01(b).
- 3. The disclosure is objected to because of the following informalities: In many places in the specification proper spaces are missing between words. See for example line 8 of page 11.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

- 4. Claims 1-8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The invention claimed relies on the calculation of an estimation coefficient. The specification makes reference to the calculation of the estimation coefficient in the last lines of page 11. To calculate the estimation coefficient use is made of a "pseudo inverse matrix", this matrix is not described or defined by the specification.
- 5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Application/Control Number: 10/586,732 Page 3

Art Unit: 2831

6. Claims 6-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claims 6-8 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are those between the elements defined by the claim's fields and the steps performed by the control unit. For example the relationship between the sliding window and the rest of steps or elements is not defined.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 9. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Tasaka et al. P.N. 6,515,477.
- 10. Tasaka et al. discloses a MRI method and apparatus in which radial scanning is performed. The acquisition is divided into groups according to a random ordering. Note that unmeasured echoes are obtained by a gridding process where interpolation is used. See lines 37-43 of col. 6.

11. Claims 6-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Meyer et al. P.N. 5,485,086.

Meyer et al. discloses a Magnetic Resonance Imaging system. The system shown in Fig. 2 includes all the elements that are routine to the performance of MRI. In addition as described in connection with Fig. 6A and 6B, temporal filtering of the acquired data is performed using a moving or sliding window. See lines 36-45 of col. 4.

- 12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ness Aiver, Weiss and Yamazaki all disclose Magnetic Resonance scanning methods. Note the abstract of each disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Louis M. Arana whose telephone number is (571) 272-2236. The examiner can normally be reached on M-Thurs. Fridays Off.

Application/Control Number: 10/586,732 Page 5

Art Unit: 2831

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on (571) 272-2245. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Louis M. Arana/ Primary Examiner, Art Unit 2831

lma 1/16/09